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Applicant respectfully requests entry of the amendments and remarks.

The following Listing of the Claims will replace all prior versions and all prior listings of the claims in the present application:

## <u>Listing of The Claims</u>:

- 1. (Previously cancelled) An isolated anti-angiogenic peptide, wherein the C-terminus of the isolated peptide comprises the amino acid sequence SYIVLCIE.
- 2. (Currently amended) An isolated polypeptide <u>comprising</u> the amino acid sequence of [which comprises residues 168-175 and a deletion mutation of an endostatin protein of] SEQ ID NO:2, wherein [the deletion mutation consists of a deletion of nine consecutive amino acids from the C-terminus of the endostatin protein] <u>said isolated polypeptide does not contain the amino acid sequence set forth in SEQ ID NO:25</u>, and wherein the isolated polypeptide has anti-angiogenic activity.
- 3. (Previously cancelled) The isolated EM 1 of Claim 2, wherein the C-terminus of the isolated EM 1 comprises the amino acid sequence SYIVLCIE.
- 4. (Currently cancelled) The isolated polypeptide of Claim 2, wherein the nine consecutive amino acids have the sequence set forth in SEQ ID NO: 25.
- 5. (Currently cancelled) The isolated polynucleotide of Claim 1, comprising:
  - (a) the nucleotide sequence of SEQ ID NO:1;
  - (b) a sequence complementary to the nucleotide sequence of SEQ ID NO: 1; and
  - (c) a sequence that hybridizes under stringent conditions to the nucleotide sequence of SEQ ID NO:1.
- 6. (Currently cancelled) An isolated polynucleotide, comprising the nucleotide sequence amplified by the primers of SEQ ID NO:8 and SEQ ID NO:9.
- 7. (Currently cancelled) An isolated polynucleotide of Claim 3, wherein the polynucleotide is operably linked to an expression control sequence.

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- 8. (Currently cancelled) A host cell transformed with the polynucleotide of Claim 7.
- 9. (Currently cancelled) The host cell of Claim 8, where the cell is selected from the group comprising bacterial, yeast, mammalian, insect or plant cells.
- 10. (Currently cancelled) A process for producing a protein encoded by the polynucleotide of claim 5, wherein the process comprises:
  - (a) growing a culture of a host cell transformed with the polynucleotide of claim 5, where the host cell is selected from the group comprising bacterial, yeast, mammalian, insect or plant cells; and
  - (b) purifying the protein form the culture; thereby producing the protein encoded by the polynucleotide of Claim 5.
- 11. (Previously amended) A fusion protein, comprising the isolated polypeptide of Claim 2.
- 12. (Currently cancelled) The fusion protein of Claim 11, further comprising at least one protein molecule selected from the group consisting of: restin, endostatin, angiostatin, apomigren, and EM 1.
- 13. (Previously amended) A composition comprising, as a biologically active ingredient, the polypeptide of Claim 2.
- 14. (Previously amended) The composition of Claim 13, and a pharmaceutically compatible carrier.
- 15. (Original) A composition comprising, as a biologically active ingredient, the fusion protein of Claim 11.
- 16. (Currently cancelled) A composition comprising, as a biologically active ingredient, the fusion protein of Claim 12.

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17. (Currently cancelled) A method of inhibiting angiogenic activity in mammalian tissue, the method comprising contacting the tissue with a composition comprising the EM1 of Claim 3.

- 18. (Currently cancelled) A method of using the composition of Claim 17 to treat a disease, the method comprising administration of the composition to a patient with a disease characterized by angiogenic activity.
- 19. (Currently cancelled) The method of Claim 18, wherein the disease is selected from the group comprising angiogenesis-dependent cancers, benign tumors, rheumatoid arthritis, psoriasis, ocular angiogenesis diseases, Osler-Webber Syndrome, myocardial angiogenesis, plaque neovascularization, telangiectasia, hemophiliac joints, angiofibroma, wound granulation, intestinal adhesions, atherosclerosis, scleroderma, hypertrophic scars, cat scratch disease, *Heliobacter pylori* ulcers, dialysis graft vascular access stenosis, contraception, and obesity.
- 20. (Currently cancelled) The method of Claim 19, wherein the disease is cancer.
- 21. (Currently cancelled) The method of Claim 20, wherein the disease is renal cancer.
- 22. (Currently cancelled) A method of using a composition comprising the isolated EM1 of Claim 3 to induce apoptosis in a cell or tissue, comprising contacting the cell or tissue with the composition.
- 23. (Currently cancelled) A method of using any of the compositions of claims 13 to 16 to treat a disease, the method comprising administration of the composition to a patient with a disease characterized by angiogenic activity.
- 24. (Currently cancelled) The method of Claim 23, wherein the disease is cancer.
- 25. (Currently cancelled) The method of Claim 23, wherein the disease is cancer.
- 26. (Currently cancelled) A process for providing a mammal with EM 1 protein, the process comprising introducing mammalian cells into a human, said mammalian cells having

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been treated *in vitro* to insert therein the polynucleotide encoding the amino acid sequence comprising EM 1 and expressing in viva in said mammal a therapeutically effective amount of the EM 1 protein.

- 27. (Currently cancelled) The process of Claim 26, wherein the cells are lymphocytes.
- 28. (Currently cancelled) The process of Claim 27, wherein the lymphocytes are chosen from the group comprising T-lymphocytes and B-lymphocytes.
- 29. (Currently cancelled) The process of Claim 26, wherein the cells are chosen from the group comprising: blood cells, TIL cells, bone marrow cells, vascular cells, tumor cells, liver cells, muscle cells, fibroblast cells.
- 30. (Currently cancelled) The process of Claim 26, wherein the polynucleotide is inserted into the cells by a viral vector.
- 31. (Currently cancelled) A process for producing an isolated polynucleotide, the process comprising the steps of:
  - (a) preparing one or more polynucleotide probes that hybridize under conditions of moderate stringency to a nucleotide sequence selected from the group consisting of:
    - (i) SEQ ID NO:1, from nucleotide 1 to nucleotide 525;
    - (ii) an isolated polynucleotide encoding a protein comprising the amino acid sequence of SEQ ID NO:2, from amino acid 1 to amino acid 175; and
  - (b) hybridizing said probe(s) to mammalian DNA; and
  - (c) isolating the DNA polynucleotide detected with the probe(s); wherein the nucleotide sequence of the isolated polynucleotide corresponds to the nucleotide sequence of SEQ ID NO:1, from nucleotide 1 to nucleotide 525.
- 32. (Currently cancelled) An isolated polynucleotide produced according to the process of Claim 31.

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33. (Currently cancelled) An isolated polynucleotide comprising the polynucleotide of Claim 32.

- 34. (Currently cancelled) Antibodies to the isolated anti-angiogenic mutant fragment of endostatin of Claim 2.
- 35. (Previously cancelled) An isolated mutant, derivative, analog or homolog of the EM 1 of Claim 2.
- 36. (Currently Allowed) A protein consisting of amino acids 1-175 of SEQ ID NO:2.